

### **REMARKS**

Applicants request favorable reconsideration of this application in view of the foregoing amendments and the following remarks. Of claims 6-29 that were pending in the application and were rejected in the Office Action, claims 6-8, 10, 12, 24, 25, and 27-29 were rejected in the Advisory Action. This Supplemental Reply and Amendment is being filed to enable the issuance of claims 9, 13-21, 23, 26, and 30-38, which the Advisory Action indicated were allowable.

By way of this Supplemental Reply and Amendment, Applicants have: (a) canceled claims 6-8, 10-12, 22, 24, 25, and 27-29, without prejudice or disclaimer; (b) amended claims 9, 13, 14, 23, and 26 in the manner set forth in the previously filed Reply and Amendment; and (c) added new dependent claims 30-38 (which respectively recite the same limitations as claims 11, 12, 7, 8, 10, 24, and 27-29 and which, therefore, do not present new matter or new issues) in the manner set forth in the previously filed Reply and Amendment. Accordingly, claims 9, 13-21, 23, 26, and 30-38, all of which were indicated as being allowable in the Advisory Action, remain pending for further consideration.

#### **1. Allowable Subject Matter**

Applicants appreciate the indication of allowable subject matter in claims 9, 13-21, and 26 in the Office Action and on page 1 of the Advisory Action. In response to this positive indication, Applicants have: (a) amended claims 9, 13, and 26 to be in independent claim format; (b) amended claim 14 (*i.e.*, the claim from which claims 15-21 depend) to resolve an indefiniteness issue, as later discussed in detail; (c) amended claim 23 to depend from allowable claim 26; and (d) added new dependent claims 30-38 to depend from allowable claims 9, 13, and 26.

#### **2. Teleconferences with the Examiner**

##### **A. August 23, 2005**

Applicants appreciate the teleconference with the Examiner on August 23, 2005. During the teleconference, the Examiner acknowledged that the rejection of claims "13-21" under 35 U.S.C. § 112, ¶ 2 (which is later discussed in detail) in Office Action ¶ 8 should have been a rejection of claims "14-21." Correspondingly, the rejection of claims "11-12, 18-19, and 28-29" under 35 U.S.C. § 112, ¶ 2 in Office Action ¶ 9 should have been a

rejection of claims “11-13, 18-19, and 28-29.” Finally, in the listing of allowable subject matter, claim 13 should have been listed in Office Action ¶ 17 along with claims 9 and 26 (as claims that contain allowable subject matter but were rejected as being dependent on rejected base claims) rather than in Office Action ¶ 16 along with claims 14-21.

**B. October 11, 2005**

Applicants’ undersigned representative called the Examiner on October 11, 2005 to resolve a discrepancy between pages 1 and 2 of the Advisory Action. Specifically, page 1 of the Advisory Action stated that the Amendment and Reply, which was filed on September 13, 2005, “will not be entered” (underline emphasis in original). In contrast, page 2 of the Advisory Action stated that the Reply and Amendment “has been entered.” During the teleconference, the Examiner indicated that the language on page 2 was erroneous and that the Reply and Amendment has, in fact, not been entered. Accordingly, various of the amendments to the claims that were submitted in the previously filed (and non-entered) Reply and Amendment are repeated herein.

**3. Listing of References Considered**

Applicants appreciate the Examiner-initialed copy of the PTO/SB/08 that was submitted along with the Information Disclosure Statement that was filed on June 4, 2004. In reviewing the listing of Examiner-cited references, Applicants note that U.S. Patent No. 5,600,634 (“Sato”), which was cited in the Final Office Action against claims 11, 12, and 23 was not listed. Accordingly, Applicants are concerned that one or more other references may have been considered but inadvertently omitted and, therefore, Applicants respectfully request that the Examiner recheck the listing of cited references.

**4. Rejections of Claim 11-21, 28, and 29 under 35 U.S.C. § 112, ¶ 2**

The Examiner rejected claims 11-21, 28, and 29 under 35 U.S.C. § 112, ¶ 2 as allegedly being indefinite. Preliminarily, this rejection is now moot with respect to claims 11, 12, 28, and 29, which have been canceled herein, without prejudice or disclaimer. Further, as claim 13 was rejected as being dependent on claims 11 and 12, the rejection of claims 11 and 12 will be addressed with respect to claim 13, which has been amended herein to be in independent claim format. Accordingly, these rejection will be addressed with respect to claims 13-21.

**a. Rejection of Claims 14-21**

The Examiner rejected claims 14-21<sup>1</sup> under 35 U.S.C. § 112, ¶ 2 as allegedly being indefinite based on a lack of a cooperative structural relationship between the radio and the drive control circuit recited in claim 14 (*i.e.*, the claim from which claims 15-21 depend). By way of the amendments made herein, claim 14 has been amended to recite that the “drive control circuit is communicatedly connected to a radio”.<sup>2</sup> Support for this recitation is implicitly provided in the two portions of the specification, which one of ordinary skill in the art would understand as being either an electrically wired connection or a wireless connection. *See* p. 3, lines 4-6; p. 12, lines 10-12. Accordingly, in light of this amendment to claim 14, Applicants respectfully submit that this rejection is now moot and, therefore, a withdrawal of this rejection under § 112, ¶ 2 is both warranted and earnestly solicited.

**b. Rejection of Claims 13, 18 and 19**

The Examiner rejected claims 13, 18, and 19<sup>3</sup> under 35 U.S.C. § 112, ¶ 2 as allegedly being indefinite due to a recitation of a “first predetermined rate” in claims 13 and 18 and a “second predetermined rate” in claims 13 and 19. The Examiner acknowledges that the specification teaches that the duty ratio of the PWM signal is increased/decreased at a rate of 8% per second. The 8% increase supports the recitation of the “first predetermined rate” recited in claims 13 and 18 and the 8% decrease supports the “second predetermined rate” recited in claims 13 and 19.

In light of the foregoing, as the first predetermine rate of claims 13 and 18 and as the second predetermine rate of claims 13 and 19 are fully supported by the 8% increase/decrease recited in the specification, the claims are sufficiently definite. Accordingly, a withdrawal of this rejection under § 112, ¶ 2 is both warranted and earnestly solicited.

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<sup>1</sup> Although the stated rejection listed claims 13-21, the Examiner acknowledged, as previously discussed, that this rejection should have been to claims 14-21.

<sup>2</sup> A similar amendment has been made to claims 9 and 26, which, like claim 14, recite the radio and the drive control circuit.

<sup>3</sup> Although the stated rejection listed claims 11, 12, 18, 19, 28, and 29, the Examiner acknowledged, as previously discussed, that this rejection should have been to claims 11-13, 18, 19, 28, and 29. Moreover, as claims 11, 12, 28, and 29 have been canceled herein, this rejection will now be addressed only with respect to claims 13, 18, and 19.

**5. Rejections of Claims 6-8, 10-12, 22-25, and 27-29 under 35 U.S.C. § 103(a)**

Under 35 U.S.C. § 103(a), the Examiner rejected:

- (a) claims 6 and 7 as allegedly being obvious when considering U.S. Patent No. 6,288,508 (“Taketomi”) in view of Satoh;
- (b) claims 8 and 10 as allegedly being obvious when considering Taketomi in view of Satoh and further in view of U.S. Patent No. 6,124,688 (“Coles”);
- (c) claims 11, 12, and 23 as allegedly being obvious when considering Taketomi in view of Satoh and further in view of U.S. Patent No. 6,208,102 (“Kikuchi”);
- (d) claims 22, 24, 28, and 29 as allegedly being obvious when considering Taketomi in view of Kikuchi; and
- (e) claims 25 and 27 as allegedly being obvious when considering Taketomi in view of Kikuchi and further in view of Coles.

For the following reasons, each of these rejections is now moot.

As claim 23 has been amended to depend from allowable claim 26, the aforementioned rejection of claim 23 is now moot. Similarly, as claims 6-8, 10-12, 22, 24, 25, and 27-29 have been canceled, without prejudice or disclaimer, the aforementioned § 103(a) rejections of these claims are also moot. Accordingly, as each of the § 103(a) rejections is now moot, the application is in condition for allowance.

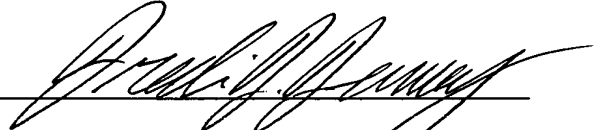
**CONCLUSION**

For the aforementioned reasons, claims 9, 13-21, 23, 26, and 30-38 are now in condition for allowance. A Notice of Allowance at an early date is respectfully requested. The Examiner is invited to contact the undersigned if such communication would expedite the prosecution of the application.

Respectfully submitted,

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By



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THE COMMISSIONER IS HEREBY AUTHORIZED TO CHARGE ANY ADDITIONAL FEES WHICH MAY BE REQUIRED REGARDING THIS APPLICATION UNDER 37 C.F.R. §§ 1.16-1.17, OR CREDIT ANY OVERPAYMENT, TO DEPOSIT ACCOUNT NO. 19-0741. SHOULD NO PROPER PAYMENT BE ENCLOSED HERewith, AS BY A CHECK BEING IN THE WRONG AMOUNT, UNSIGNED, POST-DATED, OTHERWISE IMPROPER OR INFORMAL OR EVEN ENTIRELY MISSING, THE COMMISSIONER IS AUTHORIZED TO CHARGE THE UNPAID AMOUNT TO DEPOSIT ACCOUNT NO. 19-0741. IF ANY EXTENSIONS OF TIME ARE NEEDED FOR TIMELY ACCEPTANCE OF PAPERS SUBMITTED HERewith, APPLICANT HEREBY PETITIONS FOR SUCH EXTENSION UNDER 37 C.F.R. § 1.136 AND AUTHORIZES PAYMENT OF ANY SUCH EXTENSIONS FEES TO DEPOSIT ACCOUNT NO. 19-0741.